

## REMARKS

Claims 1-31 were in the application and were rejected under Section 112 and primarily in view of Graves US Pub. 2002/0191250A1. The Examiner also raised various objections to the drawings.

While Applicant respectfully traverses the rejection of the drawings, Applicant is submitting under separate cover corrected formal drawings that address the prior art labeling issue raised by the Examiner. As for the objections under 37 CFR 1.83(a), Applicant respectfully requests that these objections be withdrawn. Applicant submits that the drawings illustrate the claimed invention in a sufficient level of detail consistent with PTO practice and requirements. As Applicant anticipates an in-person or telephone interview with the Examiner, Applicant desires to discuss any drawing-related issues with the Examiner at that time.

Applicant also respectfully traverses the rejection of the claims under Section 112. Applicant has reviewed again the originally-filed disclosure and submits that the disclosure, and the materials referenced therein, put a person skilled in the relevant art in position to implement the claimed invention without undue experimentation, as Applicant has in fact done. If there are further questions in this regard, Applicant would like to discuss these matters with the Examiner in the anticipated interview.

As for the substantive rejections in view of Graves and other references, Applicant respectfully traverses these rejections. Based on the Examiner's comments, however, and in order to clarify Applicant's invention and expedite prosecution, Applicant is herein clarifying certain important attributes of Applicant's invention.

In accordance with Applicant's invention, an Ethernet Optical Area Network ("EOAN") is provided. As Applicant's disclosure makes clear, Applicant's invention provided end-to-end Ethernet data communications using a network architecture that is router-less. In other words, Applicant's invention enables data communications over the EOAN in an Ethernet protocol, and the network is controlled without a data router. As one of skill in the art will appreciate (including from prior art references such as Graves), typically networks broader than a conventional LAN are controlled by a Layer 3 or higher data router. See, e.g., Graves use of core routers (see, e.g., core router 322 in Graves Figs. 2a-1 through Fig. 3). Data routing via a data router provides increased control and management capabilities, but also add undesirable cost and latency. Conventional architectures such as in

Graves rely on data routers to control and manage the network and route data, irrespective of the increased cost and latency. Applicant's invention goes against this conventional wisdom by providing an EOAN that provides end-to-end Ethernet data communications without a separate data router. As Applicant's description of EOAN NOC 76 in connection with Fig. 4 of Applicant's application makes clear (see, e.g., pages 24-32 of Applicant's specification, Applicant's invention enables control of data communications over the EOAN to provide end-to-end Ethernet-based communications without a data router.

Such attributes of Applicant's invention are not disclosed or suggested by Graves or other references. Graves discloses a network architecture with a data router at its core (see paragraph 134 and following paragraphs), and in this respect leads the skilled person away from Applicant's EOAN that can be implemented in router-less manner. Graves network architecture may have certain advantages, Applicant's invention provides advantages that apparently were unappreciated by Graves. Namely, Applicant's EOAN enables end-to-end Ethernet-based communications in a lower cost, lower latency router-less network.

Further support for the distinction of Applicant's invention over the network of Graves is found in Applicant's wireless "last mile" solution. Applicant describes and claims the use of free space optic and/or microwave data transmissions to user facilities. This again is in the context of providing end-to-end Ethernet-based communications in Applicant's EOAN. Graves, on the other hand, discloses the use of cellular wireless connectivity to end users (see Fig. 3 and paragraph 95 of Graves). As Applicant understands these teachings of Graves, and as Applicant believes that one of skill in the art would understand these teachings of Graves, Graves clearly is not suggesting the use of Ethernet-connectivity via cellular wireless connections. Applicant submits that Graves' disclosure of cellular "last mile" connectivity highlights that Graves is not disclosing or suggesting an end-to-end Ethernet-based EOAN as Applicant has described and claimed.

Applicant has amended the independent claims 1 and 31 to emphasize these distinctions of Applicant's invention over the cited prior art. Applicant submits that its invention, particularly as defined in the presently-pending claims, patentably distinguishes over the cited art. Reconsideration and allowance are requested.

Applicant's attorney requests an opportunity to discuss this case with the Examiner via an in-person interview in the event that these remarks are not sufficient to overcome the outstanding rejections.

No new matter has been added.

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Respectfully submitted,



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